

MARSHALL STAR

Serving the Marshall Space Flight Center Community

March 10, 2011

Discovery makes final landing at Kennedy

Space shuttle Discovery touched down at Kennedy Space Center, Fla., March 9, successfully completing the 13-day STS-133 mission to the International Space Station. Since it began its spaceflight career in 1984, Discovery has spent 365 days in space, traveled 148,221,675 miles and orbited the Earth 5,830 times. During STS-133, Discovery astronauts delivered the Permanent Multipurpose Module, a large, reusable pressurized element originally used to ferry cargo back and forth to the space station. It was formerly known as the Leonardo Multipurpose Logistics Module, which engineers at the Marshall Space Flight Center were responsible for developing and integrating from Leonardo to a permanent fixture for the orbiting facility.



Jumping for the joy of Discovery



The Leslie's take a ride in the sky above Deland, Fla., as space shuttle Discovery shoots up toward space behind them. Fred Leslie is wearing the same astronaut flight suit worn during STS-73.

By Steve Roy

A Marshall Space Flight Center aerospace engineer, Dr. Fred Leslie, and his wife Kathy waited for the launch of space shuttle Discovery perched in the door of a turboprop Skyvan aircraft some 14,000 feet above the Earth, and then jumped together into the sky above Deland, Fla., Feb. 24, as Discovery roared into the same sky some 51 miles away.

The Leslie's, both avid sport parachute enthusiasts and pilots, made the jump to commemorate Discovery's last flight into space.

See Skydiving on page 5

Purple center activity retiree badge will not be accepted after April 30; retiree rebadging required

Submitted by the Protective Services Office

The purple center activity badge that Marshall Space Flight Center retirees use to gain access to the center will no longer be accepted after April 30. Only the white and black center activity badge will be accepted starting May 1. Retirees should report to Marshall's Badging Office in Building 4312, located on Digney Road, to be rebadged.

It is a two-step process to obtain the white and black badge. A retiree will need to make two trips to Marshall's Badging Office before the badge can be issued. The first step will be creating the retiree's record in the new badging system, which could take the system 24 hours to update. For this step, a retiree must submit two original forms of identification – current driver's

license, passport, military ID and social security card. Current retiree badges are not an acceptable identity document. The second step includes taking the individual's picture and issuing the badge.

Retirees are authorized to obtain a maximum of two vehicle decals. Individuals will need to provide a center activity badge, valid driver's license, vehicle registration and proof of insurance for each vehicle.

The badge is issued for center activities only. It does not grant full access to other Marshall facilities, such as administrative areas, laboratories or test areas. Center activities that may be accessed include:

- Entry to the Redstone installation
- Marshall Wellness Center with paid membership
- MARS activities (gun, archery,

skeet, trap and tennis clubs, etc.), with paid membership

- Automotive Repair Shop
- NASA Exchange's Space Shop, barber shop, and cafeteria, all in Building 4203, during center work hours
- Recreational ball fields
- Heritage Gallery in the Building 4200 lobby during center work hours
- Center events (annual picnic, open house, etc.)
- Redstone activities (golf course, Officer's Club, restaurants, flying activity, etc.) Unique membership requirements and policies will continue to apply.

Please contact Becky Hopson at rebecca.b.hopson@nasa.gov or 256-544-4541 with any questions.

Caring in Action Program Recipient of the Month

Scott Lagrone realizes lifting beam overrated for capable lifting weight

Scott Lagrone, a heavy equipment operator for ePro LLC, supporting the Office of Center Operations, has been selected as the Caring in Action Program Recipient of the Month.

While conducting the annual load test in Building 4345 on a forklift's lifting beam, Lagrone realized the beam was overrated for its capable lifting weight. He and his co-workers determined the maximum load rate was for another model.

"A load too heavy could have fallen and hurt someone or damaged NASA equipment," said Glenda Morton, Safety Action Team chairwoman.

For more information about the Caring in Action Program or to nominate a team member, visit <https://safety.msfc.nasa.gov/sites/cia/>.



Scott Lagrone, right, receives the Caring in Action Program Recipient of the Month award from Glenda Morton during a recent Marshall senior staff meeting.

First shuttle-Mir docking

June 1995: shuttle Atlantis, Russian space station Mir

Editor's Note: STS-1 lifted off April 12, 1981, marking the first launch of a reusable spacecraft. Space shuttles have repeatedly carried people into orbit; launched, recovered and repaired satellites; conducted cutting-edge research, and built the largest structure in space, the International Space Station. As the program nears its 30th anniversary, the Marshall Star will feature images and highlights from past shuttle missions.

By Sanda Martel

The liftoff of space shuttle Atlantis June 27, 1995, on the STS-71 marked a number of historic firsts in human spaceflight: the 100th U.S. human space launch conducted from Kennedy Space Center, Fla.; the first U.S. space shuttle and Russian space station Mir docking and joint on-orbit operations; the largest spacecraft ever in orbit; and the first on-orbit change out of a shuttle crew.

Atlantis lifted off from Kennedy June 27, 1995, with crew members Robert Gibson, commander; Charles Precourt, pilot; Ellen Baker, Bonnie Dunbar and Gregory Harbaugh, all mission specialists; and Russian cosmonauts and Mir Expedition 19 crew members Anatoly Solovyev and Nicolai Budarin. Atlantis docked with Mir June 29, forming the largest spacecraft ever in orbit – a total mass of almost one-half-million pounds, or about 225 tons. Landing was July 7 at Kennedy.

During the mission, joint U.S.-Russian operations included 15 biomedical investigations using the Spacelab module installed in Atlantis' payload bay. These investigations covered seven disciplines: cardiovascular and pulmonary functions; human metabolism; neuroscience; hygiene, sanitation and radiation; behavioral performance and biology; fundamental biology; and microgravity research.

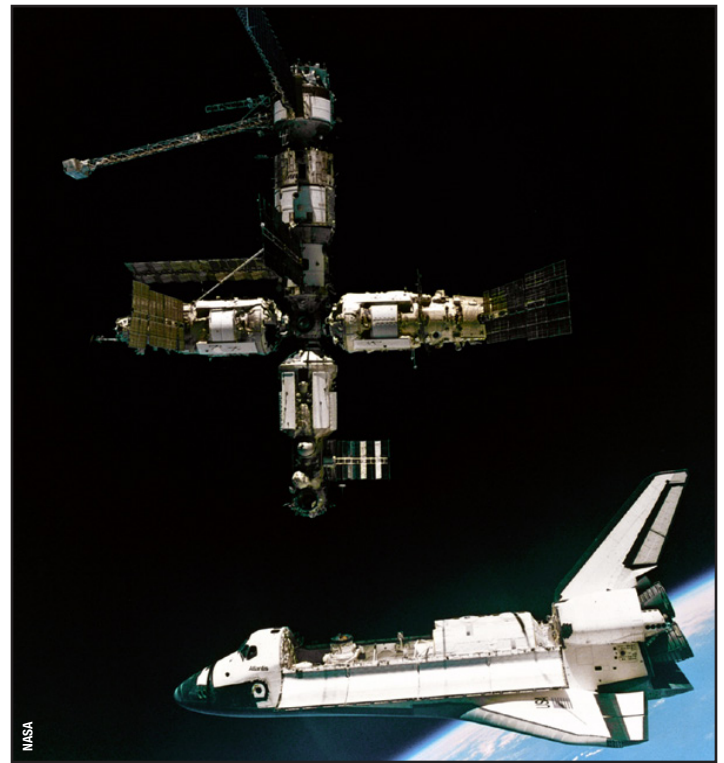
Mir crew members served as test subjects for an intensive exercise program and other measures to prepare them for re-entry to Earth after more than three months in space.

The two spacecraft undocked July 4. Gibson compared separation sequence to a "cosmic" ballet: Prior to Mir-Atlantis undocking, the Mir 19 crew temporarily abandoned the station, flying away in their Soyuz spacecraft so they could record images of Atlantis and Mir separating.

The Mir space station was for 15 years the premier space facility in orbit. The first component was launched in February 1986. Mir was manned by astronauts and cosmonauts for more than 13 years, and was visited 128 times by Russian and American spacecraft, including eight more times from 1995 to 1998 by shuttles following STS-71. This was feasible because the two facilities incorporated appropriate common hardware to allow docking. Mir was removed from space by the Russians by a fiery reentry on March 28, 2001.

"Mir" translates into English as "world," "peace" or "village."

Martel, an AI Signal Research Inc. employee, supports the Office of Strategic Analysis and Communications.



Space shuttle Atlantis departing the Russian space station Mir, in this photo taken by cosmonauts aboard Soyuz.

Obituaries

Betty J. Davis, 81, of Lexington died Feb. 25. She retired from the Marshall Center in 1989 as an administrative management specialist.

Walton Clarke, 86, of Huntsville died Feb. 27. He retired from the Marshall Center in 1999 as an aerospace engineer. He is survived by his wife, Betty Clarke.

Charles Mauldin, 73, of Huntsville died March 1. He retired from the Marshall Center in 1994 as director of the Safety & Reliability Office. He is survived by his wife, Susan Mauldin.

Marshall Association membership drive under way



The Marshall Association has reduced dues for members to \$10 through March 15. After that date, annual dues will be \$25.

Team members can learn more about joining the Marshall Space Flight Center's professional employee service organization from

11 a.m. to 12:30 p.m., March 14-15

when the association's officers will be outside the Building 4203 cafeteria each day to answer questions and sign up new members.

Open to all civil service employees, retirees and

contractors, the Marshall Association provides its members with informal networking and community-building opportunities. It sponsors an annual golf tournament, a college scholarship competition for members' children, a speakers program and, in recent years, has collected "Toys for Tots" during the holidays. The association holds monthly meetings featuring speakers and topics of interest to Marshall Center team members.

For more information, check out the Marshall Association on ExplorNet at <https://explornet.msfc.nasa.gov/groups/marshall-association> or contact Janet Anderson, association vice president for communications, at 544-6162 or at janet.l.anderson@nasa.gov.

Classified Ads

To submit a classified ad to the Marshall Star, go to Inside Marshall, to "Employee Resources," and click on "Marshall Star Ad Form." Ads are limited to 15 words, including contact numbers. No sales pitches. Deadline for the next issue, March 17, is 4:30 p.m. Thursday, March 10.

Miscellaneous

Women's cowboy boots, size 8B, brown, Charlie 1 Horse by Lucchese International, \$175. 256-536-3803

Sony Handycam, 40x optical zoom, records to 3.5" inch mini DVD, standard accessories, \$70. 256-881-0809

Hobnail leather office chair, \$100; mahogany/marble coffee table, \$100; 51 beer bottles for homebrewing, \$20. 256-351-1754

Antique natural wicker round dinette, metal base, two chairs, \$175. 256-701-5304

Chaise lounge, \$75; entertainment center, \$250, <http://jscottm.home.mchsi.com/furniture.htm>. 256-828-9651

GRACO Berkshire high chair, \$50; Baby Einstein Stationary Entertainer, \$45; Tandem double stroller, \$35. 256-895-2959

Boy's bedroom furnishings, nautical design, includes valance, bedspread, dust ruffle, pillow shams, \$100 obo. 256-533-6204

Antique telephone table with light fixture, curved table, picture available, \$150. 256-882-3895

Dining room set, leaf, six chairs, \$915. 256-961-7963

Double Dept lawn crypt, Maple Hill Cemetery, \$2,500. 256-656-1918

Canon PIXMA MP560 wireless inkjet all-in-one photo printer, \$100. 256-655-8370

White Leer 700 series, Tonneau cover, cover is on a 2006 F-250, \$700. 256-508-6840

Two blue parakeets, bird cage, toys, can text or e-mail pics, \$70 obo. 256-684-1021

Canon EOS XTi camera, three lenses, extra stuff, \$750 obo. 256-489-0292

iPad 32GB 3G case and adapters, \$650; Traxxas

Stampede, \$175 obo. 256-457-5823

Portable dog indoor/outdoor crates, Firstrax Port-A-Crate, tan, \$40; Petmate, blue, \$60. 256-653-7308

Vehicles

2003 Volkswagen new beetle, \$5,500. 256-603-1341

2000 Sea Doo, rebuilt engine, \$1,800. 256-200-7483

1995 Toyota Previa, A/C works, drips oil, 312k miles, \$650. 256-221-0711

1994 Ford Escort, white wagon, luggage rack, 120k miles, \$1,200 obo. 895-9876

16' Lowe fishing boat, 70 Hp Johnson w/Trim, two depth finders, hand-operated trolling motor, \$2,495. 256-783-2638

Wanted

Students interested in obtaining beginner to advanced scuba diver certification. 256-651-9909

Free

1995 Coleman Fleetwood Sequoia Pop-Up camper, needs repairs. 256-783-8497

Marshall hosts Federal Personnel and Payroll System meeting



On Feb. 23, the Marshall Space Flight Center hosted the Federal Personnel and Payroll System users group meeting at the Jacobs Conference Center in Huntsville. Discussing effective ways to use the system are, from left, Deborah Percival, financial program specialist, and Sheryl Cothren, information technology specialist, both in Marshall's Chief Information Office; L.C. Williams, associate director of the Human Resources Directorate for the U.S. Department of Interior in Washington; and Carolyn Plank, information technology specialist in the Chief Information Office. This system – created by the Department of Interior's National Business Center – uses state-of-the-art database technology and computer-aided software engineering tools to provide payroll support to numerous government agencies. For more information, visit <http://www.nbc.gov/payroll/fpps.html>.

Skydiving *Continued from page 1*



Fred Leslie

"Upon leaving the aircraft, we both quickly accelerated to 120 mph, fell for over a minute while posing in front of the photographer, and maneuvered to open our parachutes just above 2,000 feet above the Earth," said Leslie. The launch of Discovery was amazing, and especially beautiful to

see while free falling toward the Earth."

Leslie flew as a payload specialist on STS-73, launched Oct. 20, 1995, and landed at the Kennedy Space Center, Fla., on Nov. 5, 1995. The 16-day mission aboard space shuttle Columbia focused on materials science, biotechnology, combustion science and fluid physics contained within the pressurized Spacelab module. He has logged 382 hours in space.

At Marshall, Leslie is a member of the Engineering Directorate, supporting global atmospheric modeling and turbulence.

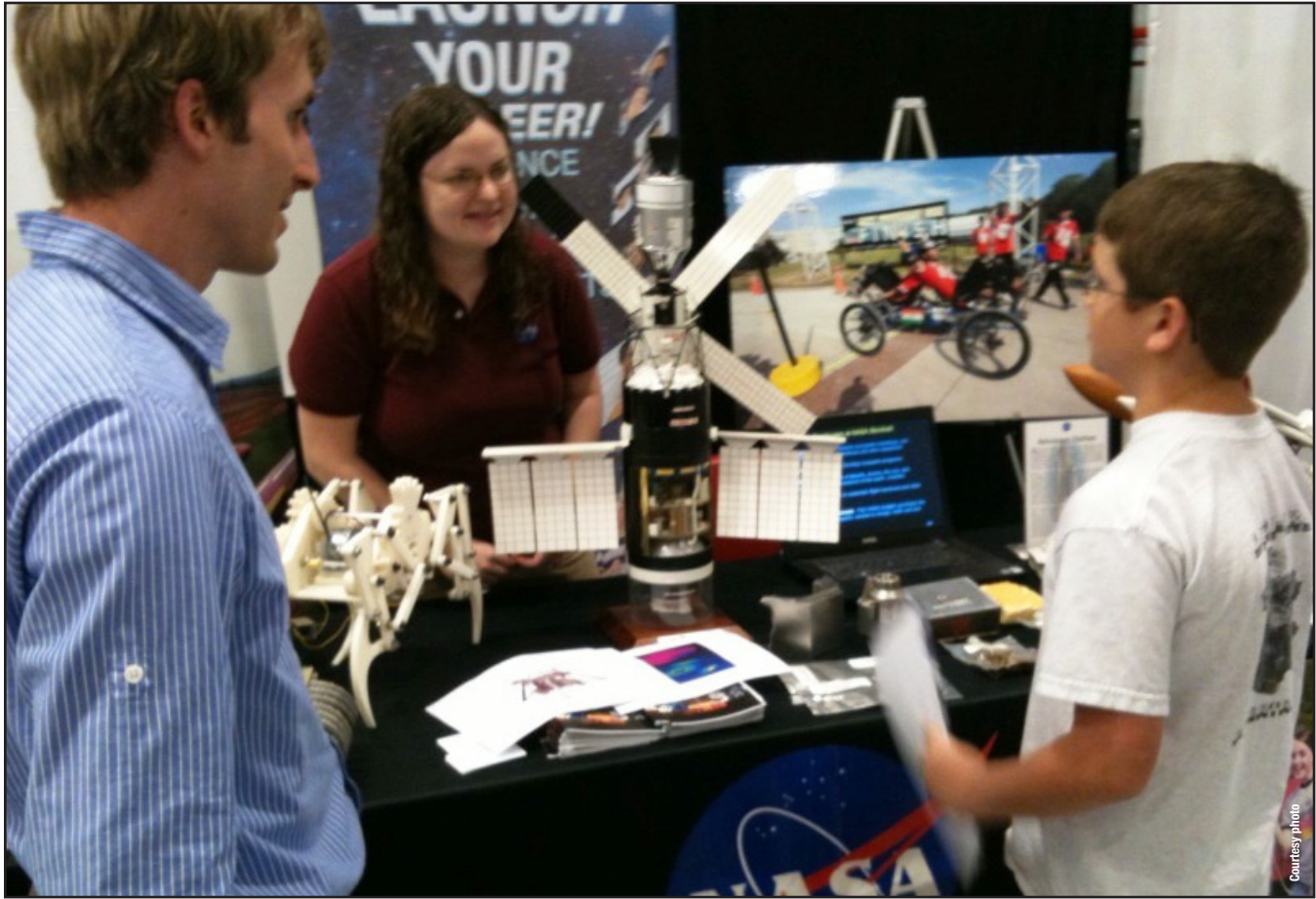
With more than 5,600 parachute jumps, he enjoys skydiving and has earned multiple world records as a participant in large freefall formations, including the current 400-person formation. Kathy Leslie, also a world record holder, has made about 2,400 jumps, and they have completed some 1,000 parachute jumps together.

Roy is a public affairs officer in the Office of Strategic Analysis & Communications.



Fred Leslie and his wife Kathy jump out of a Skyvan aircraft.

Stimulating young minds



About 200 seventh- to 12th-grade students from Jackson County, Ala., attending a career fair at Pisgah High School, recently learned about NASA and what fields to study if they would like to work for the agency in the future. Brian O'Connor, left, and Sarah Sandridge, right, both aerospace engineers in the Marshall Space Flight Center's Engineering Directorate, talk to a student about NASA's Great Moonbuggy Race. The race, organized by the center, will be April 1-2 at the U.S. Space & Rocket Center in Huntsville. Each year, it challenges students to design, build and race lightweight, human-powered rovers – overcoming some of the same challenges met by Apollo-era lunar rover developers in the late 1960s. Marshall supported the career fair by hosting a booth filled with exciting NASA informational materials to spark

interest in science, technology, engineering and mathematics – or STEM – and to market student opportunities supported by the center's Academic Affairs Office in the Office of Human Capital. Included were posters of programs such as Student Launch Initiative, which challenges middle and high school students to design, build and launch a reusable rocket with a scientific or engineering payload; and flyers outlining the Interdisciplinary National Science Project Incorporating Research and Education Experience program, known as INSPIRE. It is aimed at ninth- to 12th-grade students interested in STEM careers. The booth also featured scale models of the space shuttle, Ares I and V, and Skylab, along with shuttle tile and insulation, astronaut gloves and food, and a small robot.

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